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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,901	02/13/2002	Lionel Denecheau	FR920010001US1	3664
25259	7590	04/08/2005	EXAMINER	
IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			DENNISON, JERRY B	
		ART UNIT		PAPER NUMBER
		2143		

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,901	DENECHEAU ET AL.	
	Examiner	Art Unit	
	J. Bret Dennison	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 and 9 is/are rejected.
- 7) Claim(s) 6-8 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 13 February 2002.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

1. This Action is in response to Application Number 10/076,901 received on 13 February 2002.
2. Claims 1-9 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 5 and 8 recites the limitation " skipping the following setting step". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hinchey et al. (U.S. Patent Number 5,999,541).

4. Regarding claims 1 and 2, Hinchey disclosed a method, for use on a LAN wherein a plurality of stations are physically connected to a shared transmission

medium and operate according to a collision protocol, for providing a collision-free protocol that operates concurrently with the collision protocol, the method comprising the steps of:

forming a logical ring among a subset of the plurality of stations physically connected to the shared transmission medium;

circulating a token among stations of the logical ring;

transmitting, according to the collision protocol, from a first station that is a member of the logical ring, only while the first station holds the token; and

transmitting, according to the collision protocol but without regard for the token, from a second station that is physically connected to the shared transmission medium but not a member of the logical ring [Hinchey, Fig. 1, col. 1, lines 22-26, Hinchey disclosed integrating token ring network across a LAN, col. 2, lines 60-65, col. 3, lines 1-12, Hinchey disclosed being able to transmit a Token Ring packet over an Ethernet network. Figure 1 of Hinchey shows computers set up in a token ring over a LAN, which also includes computers that are not part of the token ring. This implies that a virtual token ring is set up within a local area network in which all computers have the ability to communicate with each other, whether they are part of the token ring or not. The computers that are part of the token ring are still sending a modified token ring packet over the Ethernet network. Therefore packets are being transferred both in a collision protocol (Ethernet) and a collision-free protocol (Token Ring)].

5. Regarding claim 4, Hinchey disclosed the limitations, substantially as claimed, as described in claim 2, including wherein each station of the logical ring includes a collision-control sublayer that comprises a transmit queue (Hinchey, col. 2, lines 1-20, Hinchey disclosed all stations of the token ring sending packets on Ethernet, meaning that each station must have a transmit queue on the collision-control sublayer).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hinchey in view of obviousness.

6. Regarding claim 3, Hinchey disclosed the limitations, substantially as claimed, as described in claim 2. Hinchey does not explicitly state wherein the shared transmission medium complies with IEEE Standard 802.3. However, IEEE Standard 802.3 is a conventional frame based data communications protocol for Ethernet. Therefore it would have been obvious for a network administrator to use IEEE Standard 802.3 as the protocol for the Ethernet system of Hinchey to follow a standard protocol for communication. For further information on Ethernet Standards, see Rostoker et al. (U.S. 5,802,287).

7. Regarding claim 5, Hinchey disclosed the limitations, substantially as claimed, as described in claim 2. Hinchey does not explicitly state wherein said transmitting step includes, in said any one station part of said logical ring, the further steps of:

checking whether said any one station holds said token or not;
if not, keep waiting until said token is received;
if holding said token, checking if said transmit queue is empty;
if empty, skipping following placing step;
if not empty, placing a first or only frame from said transmit queue on said shared medium, thus transmitting said frame;
retrieving an ID of an immediate next station in sequence in said logical ring;
forwarding said token to said immediate next station; and
resuming to first checking step to wait for a next occurrence of said token.

In an analogous art, Zhao disclosed normalized proportional synchronous bandwidth allocation in a token ring network by setting a maximum transmission time wherein the functionality of sending messages on a token ring is described. Figure 4 of Zhao shows checking to see if a token arrived (Zhao, Fig 4, 84), checking if the transmit buffer is empty (Zhao, Fig 4, 88), transmitting data (Zhao, Fig 4, 94), releasing the token to the next station and return to checking for a token (Zhao, Fig 4, 106, 84).

Hinchey disclosed using a token ring system over Ethernet packets, but does not provide detail for the functionality of the token ring. Zhao provides the functionality of the token ring. Therefore it would have been obvious to one in the ordinary skill in the

Art Unit: 2143

art at the time of the invention to be motivated to combine the teachings of Hinchey and Zhao to provide bandwidth allocation in a real time distributed system (Zhao, col. 2, lines 43-50).

8. Regarding claim 9, Hinchey disclosed the limitations, substantially as claimed, as described in claim 5, including wherein said step of checking whether said any one station holds said token or not includes the further steps of:

checking whether said token has been received, if said token has been received, resetting a RTT (Ring Token Timer) and keep cycling (Zhao, col. 10, lines 20-35);

if said token has not been received, checking whether said RTT has elapsed or not; if said RTT has not elapsed, keep cycling (Zhao, col. 10, lines 20-35);

Zhao also discloses a token rotation time available to each station to transmit messages (Zhao, see Abstract).

However, Hinchey and Zhao do not explicitly state if said RTT has elapsed, issuing a RR (Ring Restart) message to inform all stations of said logical ring to restart insertion. It would have been obvious to one in ordinary skill in the art to have the station issue a restart to inform all other stations of the logical ring to restart insertion in case of failure to one of the stations causing the path to be broken.

Allowable Subject Matter

9. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd

Art Unit: 2143

paragraph, set forth in this Office action and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

11. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

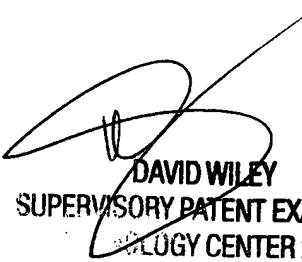
13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2143

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. B. D.
Patent Examiner
Art Unit 2143



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